

What is claimed is:

1. Apparatus for treating tachyarrhythmias, comprising:

treatment means for delivering a first therapy to a patient's heart to treat tachycardia and a second therapy to said patient's heart to treat fibrillation;

first means for sensing electrical signals from said patient's heart indicative of the depolarization of a chamber or chambers of said patient's heart;

means for measuring and storing the intervals separating said electrical signals:

means for detecting the occurrence of a tachyarrhythmia; and
tachycardia/fibrillation discriminator means responsive to said detecting means for selecting between said first and second therapies.

2. The apparatus of claim 1 wherein:

said discriminator means in turn comprising:

means for sorting said measured intervals into interval ranges;
means for determining the numbers of intervals within each said interval range;

means for identifying ones of said interval ranges which have the highest numbers of said stored intervals;

means for determining the total number of said stored intervals falling within said identified interval ranges;

means for deriving a variable threshold criterion varying as a function of the length of the intervals separating preceding depolarizations; and

means for triggering said first therapy if said total number meets said variable threshold criterion.

3. The apparatus of claim 1 wherein the deriving means comprises means for deriving said threshold criterion as a value which increases as an inverse function of the length of the intervals separating preceding depolarizations.

4. A device according to claim 1 wherein the deriving means comprises means for deriving said threshold criterion as a value which increases as an inverse function of the length a defined percentile interval over a sequence of a predetermined number of intervals separating preceding depolarizations.

5. A device according to claim 1 wherein the deriving means comprises means for deriving said threshold criterion as a value which increases as an inverse function of the length of the 75th percentile interval over a sequence of a predetermined number of intervals separating preceding depolarizations.